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REMARKS

Claims 1-5 and 7-34 are pending in the application. This Amendment currently amends the claims to attempt to clarify terminology for the benefit of the Examiner's evaluation. No new matter is added and claims are currently amended to merely attempt to clarify the subject matter of the claims and in no way narrow the scope of the claims in order to overcome the prior art or for any other statutory purpose of patentability.

Notwithstanding any claim amendments of the present Amendment or those amendments that may be made later during prosecution, Applicant's intent is to encompass equivalents of all claim elements. Reconsideration in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1, 2, 4, 5, 7, 8, 10-18, 20-28, and 30-32 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 5,848,064 to Cowan, further in view of US Patent 6,237,144 to Delo. Claims 3, 9, 19, 29, and 33 stand rejected under 35 U.S.C. §103(a) as unpatentable over Cowan, further in view of Delo, and further in view of U.S. Patent No. 5,842,216 to Anderson et al. Claim 34 stands rejected under 35 U.S.C. §103(a) as unpatentable over Cowan, further in view of U.S. Patent No. 5,414,751 to Yamada.

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

The claimed invention, as described in, for example, claim 1, is directed to a terminal device including a memory that includes a program storage area, a program executing area, and a memory management table. The program storage area stores at least two programs grouped into at least two groups with respect to overall functions of the terminal device, as supported by the programs. The at least two groups include categorization whether a program is necessary for a change of an overall function to be executed by the terminal device, so that the program storage area thereby includes a to-be-used program and, possibly, a to-be-removed program, according to a selection by a terminal device user to change a current overall function of the terminal device to a new overall function.

The program executing area stores programs for executing the new overall function.

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The memory management table stores data designates which of any programs in the program storage area are necessary for the new overall function, thereby allowing each to-be-used program and to-be-removed program to be identified for the new overall function and allowing the to-be-used program to contain only programs necessary to execute the new overall function, when used in combination with appropriate programs already stored in the terminal device for executing the current overall function. The data also allows any of said to-be-removed program to be removed when the new overall function is activated.

As discussed at lines 19-25 of page 1 of the present Application, conventional methods of downloading new overall functions of the terminal device require that an entire new program be downloaded, since the conventional wisdom teaches writing these programs as one program that includes a main program plus all application programs for supporting the new overall function.

In contrast, the present invention teaches that the program that executes the overall function of the terminal device can be written as standalone application programs that can be controlled by a standalone main program to execute the selected overall function. Therefore, when an overall function is changed, only those programs that have to be added for the newly-selected overall function need to be downloaded, as viewed to be combined with any application programs currently stored in the terminal device.

Thus, a change in selected overall function would cause only a new main program to be supplied, along with any new or revised application programs required to execute the new overall function, when combined with any appropriate application programs currently being stored in the terminal device. This novel method, therefore, reduces the number and size of programs to be transferred to the terminal device whenever an overall function of the terminal device is changed by a user selection.

II. THE PRIOR ART REJECTIONS

The Examiner alleges that Cowan, when modified by Delo, renders obvious claims 1, 2, 4, 5, 7, 8, 10-18, 20-28, and 30-32, and, when further modified by Anderson, renders obvious claims 3, 9, 19, 29, and 33. The Examiner also alleges that Cowan, when modified by Yamada, renders obvious claim 34.

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Applicant respectfully disagrees. Although there seems to be some confusion in terminology, a key aspect of the present invention is a departure from the conventional wisdom that the terminal device program be one large program, the entirety of which must be downloaded whenever a terminal device function is changed by a user selection.

That is, the present invention teaches that separate application programs be stored in the terminal device to control the functions of the various devices in the terminal device. An overall function is executed by a main program that controls how these various application programs are implemented to execute the overall function.

Whenever the current overall function is changed by a user selection, it is necessary only to load a new main program and/or new specific application programs appropriate for the change. Application programs currently stored in the terminal device can selectively be retained and re-booted into the program execution area, along with the new main program and/or new specific application programs. In this manner, there is no need to load an entire new standalone program for each change of the overall function of the terminal device.

Applicant submits that Cowan teaches the conventional method of loading an entire new program whenever an overall function of the terminal device is changed, as clearly reflected at lines 24-28 of column 12: *"In the event it is determined that a new version exists, every file identified in the package definition file for the corresponding package name is downloaded regardless of whether only one file or more than one file has been changed, added and/or deleted in the package."*

Therefore, because Cowan explicitly contradicts the method described in the independent claims of the present invention, this reference cannot be modified to allege that the method of the present invention would thereby be rendered obvious.

Hence, turning to the clear language of the claims, in Cowan there is no teaching or suggestion of: "... allowing said to-be-used program to contain only programs necessary to execute said new overall function, when used in combination with appropriate programs already stored in said terminal device for executing said current overall function", as required by independent claim 1. Independent claims 5, 15, 22, 32, and 34 have similar language.

Relative to the rejection for independent claim 33 (as well as dependent claims 9, 19, and 29), Applicant brings to the Examiner's attention that the plain meaning of the claim

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language precludes the interpretation that a checksum is used for reliability of confirming version information. That is, the plain meaning of the claim language requires that the checksum be used as the mechanism to transfer a program from a program storage area into a program execution area within the terminal device itself.

It is not used, as done in Anderson, for purpose of determining version information or for increasing reliability of transmission between machines. In the present invention, the memory management table contains data of which application programs are currently installed in the terminal device and transmits this information to the program-transferring device that generates a new main program and any additional application programs necessary for a change in the terminal device function. It is left up to the program-transferring device to decide which application programs require to be added or updated.

Moreover, in the present invention, the checksum comparison is used to ensure that all of the programs necessary for the new function are rebooted back into the program execution area. That is, the new main program, new application program(s), and any existing application program(s) copied into the program storage from the program execution area from the previous function programming and which are necessary for the new function, will be sequentially rebooted into the program execution area until the two checksums agree. The prior art of record fails to teach or suggest this use of a checksum comparison.

The Examiner relies upon Delo for demonstrating a relational database and upon Yamada for demonstrating transfer of programs between memories. Applicant respectfully submits that, as clearly taught in the above-recited lines from Cowan, the program updating method of Cowan depends upon copying all files during the downloading. Therefore, no relational database is required.

Moreover, the memory transfer process in Yamada relates to a version upgrade process in a mobile telephone, not to a change in the selected overall function, and the memory transfer is between a RAM and the EEPROM areas of memory (the reverse of the memory roles of the present invention).

Therefore, Applicant submits that one of ordinary skill in the art would not have been motivated to modify Cowan with either of Delo or Yamada and that, even if combined with Cowan, would not overcome the deficiency identified above that Cowan expressly teaches

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against a key feature of the present invention identified in independent claims 1, 5, 15, 22, 32, and 34.

For at least the reason outlined above, Applicant respectfully submits that Cowan cannot be used as the primary reference for evaluation of the prior art, since it expressly teaches against a key feature of the present invention. Therefore, reconsideration and withdrawal of these rejections based on Cowan is, therefore, respectfully solicited.

III. CONCLUSION

In view of the foregoing, Applicant submits that claims 1-5 and 7-34, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

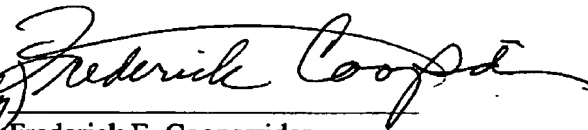
Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date:

7/14/05
(correction of claim 2 only)
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